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the other of the first or second positions, the actuator adding energy to the tissue penetrating member as the tissue penetrating member moves from the first position to the second position.

Sub C2
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67. (Amended) An intravascular therapeutic catheter as in claim 57 wherein the catheter body has a proximal portion and further comprising

a fluid delivery lumen located in the catheter body extending from [a] the proximal portion to a position proximate the tissue penetrating member for delivering a fluid to the location of the tissue penetrating member.

Sub C3
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70. (Amended) An intravascular therapeutic catheter as in claim 57 wherein:

the tissue penetrating member is adapted for [rotary] motion about a pivot point between the first non-penetrating position and the second tissue penetrating position; and

the second position is defined by maximum storage of energy in the tissue penetrating member thereby defining motion over a limited distance.

Sub C4
A4
74. (Amended) An intravascular therapeutic catheter comprising:
an elongate catheter body having a distal portion;
a tissue penetrating member disposed proximate the distal portion, operably coupled to the elongate catheter body, and having a first non-penetrating position and a second tissue penetrating position; and
an actuator member disposed proximate the distal portion and operably coupled to the tissue penetrating member, for moving the tissue penetrating member from

one of the first or second positions to the other of the first or second positions, the tissue penetrating member releasing stored energy as the penetrating member moves from the first position to the second position.

Q4 75. (Amended) An intravascular therapeutic catheter as in claim 74, wherein the catheter body includes a constraining lumen and the first position of the penetrating member is a constrained position where the tissue penetrating member is located within [a] the constraining lumen, and wherein the second position is an unconstrained position where the tissue penetrating member is not constrained by the constraining lumen.

Sub C5
Q5 78. (Amended) An intravascular therapeutic catheter of claim 74 wherein:

the tissue penetrating member is adapted for [rotary] motion about a pivot point between the first non-penetrating position and the second tissue penetrating position; and

the second position is defined by complete release of the stored energy thereby defining motion over a limited distance.

Sub C6
Q6 82. (Amended) An intravascular therapeutic catheter comprising:
an elongate catheter body having distal portion, and having an axis;
a tissue penetrating member disposed proximate the distal portion operably coupled to the elongate catheter body and having a first non-penetrating position and a second tissue penetrating position and having a pivot point; and

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an actuator member disposed proximate the distal portion
and operably coupled to the tissue penetrating
member, for moving the tissue penetrating member from
one of the first or second positions to the other of
the first or second positions about the pivot point.

83. (Amended) An intravascular therapeutic catheter as in claim
82, wherein the catheter body includes a constraining lumen and the
actuator member moves the tissue penetrating member from [a] the
constraining lumen within the catheter.

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86. (Amended) An intravascular therapeutic catheter comprising:
an elongate catheter body having a distal portion and an
axis;
a tissue penetrating member disposed proximate the distal
portion and operably coupled to the elongate catheter
body and having a first non-penetrating position and
a second tissue penetrating position; and
an actuator member disposed proximate the distal portion
and operably coupled to the tissue penetrating
member, for moving the tissue penetrating member from
one of the first or second positions to the other of
the first or second positions in a substantially
[lateral] transverse path with respect to the axis.

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91. (Amended) An intravascular therapeutic catheter comprising:
an elongate catheter body having a distal portion and an
axis;
a tissue penetrating member disposed proximate the distal
portion and operably coupled to the elongate catheter
body and having a first non-penetrating position and
a second tissue penetrating position; and

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an actuator member disposed proximate the distal portion
and operably coupled to the tissue penetrating
member, for moving the tissue penetrating member a
limited distance from one of the first or second
positions in a direction substantially non-parallel
to the catheter body to the other of the first or
second positions.

Sub C9
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93. (Amended) An intravascular therapeutic catheter as in claim
91, wherein the actuator member moves the tissue penetrating member
along a lateral path with respect to the [a longitudinal] axis of
the catheter body.

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Sub C10
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97. (Amended) An intravascular therapeutic catheter as in claim
91, wherein the tissue penetrating member is [cold] cooled.

Q11
103. (Amended) A method for treating cardiac tissue comprising
the steps of:

providing an intravascular therapeutic catheter having an
elongate catheter body, an actuator and a tissue
penetrating member operably coupled to the catheter
body and disposed proximate a distal portion of the
catheter body, the tissue penetrating member having
a first non-penetrating position and a second tissue
penetrating position;
navigating the catheter through vasculature to a treatment
site proximate the cardiac tissue; and
adding energy to the tissue penetrating member to move the
tissue penetrating member from the first position in
a direction substantially non-parallel to the
catheter body to the second position.

110. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

releasing energy from the tissue penetrating member to move the tissue penetrating member from the first position to the second position.

116. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a pivot point, a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions about the pivot point.

117. (Amended) A method for treating cardiac tissue as in claim 116 wherein the catheter body includes a restraint lumen and the tissue penetrating member is restrainable in [a] the restraint lumen;

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and wherein the step of moving the tissue penetrating member further comprises moving the tissue penetrating member from the restraint lumen whereby the tissue penetrating member moves from one of the first or second positions to the other of the first or second positions about the pivot point.

120. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions in a substantially [lateral] transverse path with respect to a longitudinal axis of the catheter body.

125. (Amended) A method for treating cardiac tissue comprising the steps of:

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A¹⁵
providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

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navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and moving the tissue penetrating member a limited distance from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions.

130. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;
moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug to the treatment site wherein the drug is selected from the group consisting of: a peptide, a protein and a fragment thereof.

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132. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-

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penetrating position and a second tissue penetrating position;
navigating the catheter through vasculature to a treatment site;
moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and
delivering a drug comprising a genetic material to the treatment site.

133. (Amended) A method for treating cardiac tissue as in claim [131] 132 wherein the genetic material, when incorporated into the tissue penetrating member, results in the expression of therapeutic materials.

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139. (Amended) A method of treating cardiac tissue as in claim 132 wherein the cardiac tissue is proximate a coronary vessel having a wall and wherein the drug is delivered outside the wall of [a] the coronary vessel.

140. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position;
navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

Q18
moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and
delivering a drug to the treatment site wherein the drug is selected from the group consisting of: heat shock protein, a hormone, ATP, an ATP precursor, glucose, and a metabolic intermediate.

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142. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

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moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug comprising glycoprotein or a fragment thereof to the treatment site.

143. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the

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penetrating member having a first non-penetrating position and a second tissue penetrating position, and further having an actuator member operably coupled to the tissue penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;
navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;
actuating the tissue penetrating member whereby the tissue penetrating member moves from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and
delivering a drug to the treatment site wherein the drug is selected from the group consisting of: a peptide, a protein and a fragment thereof.

147. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position, and further having an actuator member operably coupled to the penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;

A20 navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;
actuating the tissue penetrating member whereby the tissue penetrating member moves from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and
delivering a drug comprising a genetic material to the treatment site.

151. (Amended) A method for treating cardiac tissue comprising the steps of:

A21 providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position, and further having an actuator member operably coupled to the penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;
navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;
actuating the tissue penetrating member whereby the tissue penetrating member moves from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and
delivering a drug to the treatment site wherein the drug is selected from the group consisting of: heat shock

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protein, a hormone, ATP, an ATP precursor, glucose, and a metabolic intermediate.

155. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position, and further having an actuator member operably coupled to the tissue penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

actuating the tissue penetrating member whereby the tissue penetrating member moves from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug comprising a glycoprotein or a fragment thereof to the treatment site.

Please add claims 163-166 as follows:

Q23
--163. The method of claim 130 wherein delivering comprises:
delivering the drug to myocardium.